



EMI TEST REPORT

Test Report No. : 25KE0218-HO-1b

Applicant : **Sharp Corporation**
Type of Equipment : **GSM & WCDMA Cellular Phone**
Model No. : **703SHf**
FCC ID : **APYHRO00043**
Test standard : **FCC Part 15 Subpart C**
Section 15.207, Section 15.247: 2005
Test Result : **Complied**

1. This test report shall not be reproduced in full or partial, without the written approval of UL Apex Co., Ltd.
2. The results in this report apply only to the sample tested.
3. This equipment is in compliance with the above regulation. We hereby certify that the data contain a true representation of the EMC profile.
4. The test results in this report are traceable to the national or international standards.

Date of test: August 18, 19, and 24, 2005

Tested by:

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EMC Services

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Approved by :

Naoki Sakamoto
Group Leader of
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UL Apex Co., Ltd.

Head Office EMC Lab.

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99% Occupied Bandwidth	40

SECTION 1: Client information

Company Name	:	Sharp Corporation
Brand Name	:	SHARP
Address	:	2-13-1 Iida Hachihonmatsu HigashiHiroshima-City,Hiroshima-pref. Japan
Telephone Number	:	+81-82-420-1592
Facsimile Number	:	+81-82-420-1852
Contact Person	:	Keichoh Arima

SECTION 2: Equipment under test (E.U.T.)

2.1 Identification of E.U.T.

Type of Equipment	:	GSM & WCDMA Cellular Phone
Model No.	:	703SHf
Serial No.	:	004400/01/056813/5 for Antenna Terminal 004400/01/056817/6 for Radiated Emission and Conducted Emission
Country of Manufacture	:	China
Condition of EUT	:	Production prototype (Not for Sale: This sample is equivalent to mass-produced items.)
Receipt Date of Sample	:	August 17, 2005

2.2 Product Description

Model: 703SHf (referred to as the EUT in this report) is Tri-Band GSM & WCDMA Mobile Cellular Phone.
The EUT has the function that Bluetooth wireless technology interface for establishing contact and transmitting data with certain devices.

Clock frequency(ies) in the system	:	CPU:13MHz RTC:32.768KHz
Equipment Type	:	Transceiver
Frequency band	:	Lower limit: 2402MHz Upper limit: 2480MHz
Bandwidth & Channel spacing	:	1MHz & 1MHz
Modulation	:	FHSS
Mode of Operation	:	Simplex
ITU code	:	F1D
Power Supply	:	DC3.7V (EUT input) DC 2.9V (RF Module input)
Antenna Type	:	Internal Antenna
Antenna Connector Type	:	Soldering
Antenna Gain	:	0dBi

FCC 15.31 (e)

The stable voltage (DC3.7V) is provided to the EUT and it is converted to DC2.9V and then constantly supplied to RF module part. Therefore, this EUT complies with the requirement.

FCC Part 15.203 Antenna requirement

It is impossible for end users to replace the antenna, because the antenna is mounted inside of the EUT. Therefore, the equipment complies with the antenna requirement of Section 15.203.

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SECTION 3: Test specification, procedures & results

3.1 Test Specification

Test Specification : FCC Part15 Subpart C : 2005

Title : FCC 47CFR Part15 Radio Frequency Device Subpart C Intentional Radiators
Section 15.207 Conducted limits : 2005
Section 15.247 Operation within the bands 902-928MHz,
2400-2483.5MHz, and 5725-5850MHz : 2005

3.2 Procedures and results

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst Margin*0)	Results
1	Conducted Emission *1)	ANSI C63.4:2003 7. AC powerline conducted emission measurements	Section 15.207	-	N/A	6.3dB (2.30692MHz, AV, L)	Complied
2	Carrier Frequency Separation	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(a)(1)	Conducted	N/A	*See data.	Complied
3	20dB Bandwidth	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(a)(1)	Conducted	N/A		Complied
4	Number of Hopping Frequency	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(a)(1)(iii)	Conducted	N/A		Complied
5	Dwell time	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(a)(1)(iii)	Conducted	N/A		Complied
6	Maximum Peak Output Power	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(b)(1)	Conducted	N/A		Complied
7	Band Edge Compliance	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(d)	Conducted	N/A		Complied
8	Spurious Emission	ANSI C63.4:2003 13. Measurement of intentional radiators	Section 15.247(d)	Conducted/ Radiated	N/A	0.9dB (2483.5MHz, PK, Ver.)	Complied

Note: UL Apex's EMI Work Procedures No.QPM05 and QPM15.

*0) The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*1) There is no difference in output levels of 3 Channels (Low/Mid/High) at both QP/AV data, and all the levels complied with the limit. Therefore, only the representative channel (High: 2480MHz) was tested.

Uncertainty:

Conducted Emission

The measurement uncertainty (with a 95% confidence level) for this test is ± 1.3 dB.

The data listed in this test report has enough margin, more than the site margin.

Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test using Biconical antenna is ± 4.5 dB(3m)/ ± 4.7 dB(10m).

The measurement uncertainty (with a 95% confidence level) for this test using Logperiodic antenna is ± 5.2 dB(3m)/ ± 3.8 dB(10m).

The measurement uncertainty (with a 95% confidence level) for this test using Horn antenna is ± 6.6 dB.

The data listed in this report meets the limits unless the uncertainty is taken into consideration.

Other test except Conducted Emission and Spurious Emission (Radiated)

The measurement uncertainty (with a 95% confidence level) for this test is ± 3.0 dB.

The data listed in this test report has enough margin, more than the site margin.

*These tests were also referred to FCC Public Notice DA 00-705 "Guidance on Measurement for Frequency Hopping Spread Spectrum Systems".

*These tests were performed without any deviations from test procedure except for additions or exclusions.

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3.3 Addition to standards

No.	Item	Test Procedure	Specification	Remarks	Deviation	Worst margin	Results
1	99% Occupied Band Width	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4: 2004	RSS-210(issue 5): 2001 + Amendment:2002 + Amendment2:2003 + Amendment3:2004 + Amendment4: 2004	Conducted	N/A	N/A	N/A

3.4 Test Location

UL Apex Co., Ltd. Head Office EMC Lab. *NVLAP Lab. code: 200572-0
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	FCC Registration Number	IC Registration Number	Width x Depth x Height (m)	Size of reference ground plane (m) / horizontal conducting plane	Other rooms
No.1 semi-anechoic chamber	313583	IC4247A	19.2 x 11.2 x 7.7m	7.0 x 6.0m	Preparation room
No.2 semi-anechoic chamber	846015	IC4247A-2	7.5 x 5.8 x 5.2m	4.0 x 4.0m	-
No.3 shielded room	-	-	4.7 x 7.5 x 2.7m	4.7 x 7.5m	-
No.4 measurement room	-	-	3.1 x 5.0 x 2.7m	N/A	-

* Size of vertical conducting plane (for Conducted Emission test) : 2.0 x 2.0m for No.1 and No.2 semi-anechoic and No.3 shielded room.

3.5 Test set up, Test instruments and Data of EMI

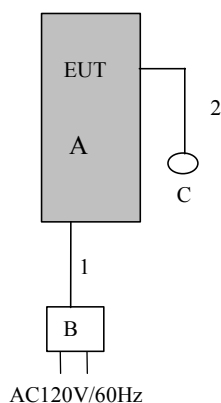
Refer to APPENDIX 1 to 3.

SECTION 4: Operation of E.U.T. during testing

4.1 Operating Modes

The mode is used : Transmitting mode (PRBS9/ Packet size DH5)
Low Channel :2402MHz
Mid Channel :2441MHz
High channel :2480MHz
Inquiry

4.2 Configuration and peripherals



*Cabling was taken into consideration and test data was taken under worse case conditions.

Description of EUT and Support equipment

No.	Item	Model number	Serial number	Manufacturer	FCC ID
A	GSM & WCDMA Cellular Phone	703SHf	004400/01/056813/5 for Antenna Terminal 004400/01/056817/6 for Radiated Emission and Conducted Emission	Sharp Corporation	APYHRO00043
B	AC Charger	SHCAA1	-	HOSHIDEN	N/A
C	Earphone	-	-	-	N/A

List of cables used

No.	Name	Length (m)	Shield	Backshell Material
1	AC Charger Cable	1.5	N	Polyvinyl chloride
2	Earphone Cable	1.8	N	Polyvinyl chloride

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SECTION 5: Conducted Emission

Test Procedure and conditions

EUT was placed on a platform of nominal size, 1m by 0.5m, raised 80cm above the conducting ground plane. The rear of tabletop was located 40cm to the vertical conducting plane. The rear of EUT, including peripherals aligned and flushed with rear of tabletop. All other surfaces of tabletop were at least 80cm from any other grounded conducting surface. EUT was located 80cm from a Line Impedance Stabilization Network (LISN)/ Artificial mains Network (AMN) and excess AC cable was bundled in center.

For the tests on EUT itself (as a stand alone equipment)

Each EUT current-carrying power lead, except the ground (safety) lead, was individually connected through a LISN /(AMN) to the input power source. All unused 50ohm connectors of the LISN(AMN) were resistivity terminated in 50ohm when not connected to the measuring equipment.

The AC Mains Terminal Continuous disturbance Voltage has been measured with the EUT in a Semi Anechoic Chamber or a Measurement Room.

The EUT was connected to a LISN (AMN).

An overview sweep with peak detection has been performed.

Detector	: CISPR quasi-peak and average detector (IF BW 9 kHz)
Measurement range	: 0.15-30MHz
Test data	: APPENDIX 3
Test result	: Pass

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SECTION 6: Spurious Emission

[Conducted]

Test Procedure

The Out of Band Emission was measured with a spectrum analyzer connected to the antenna port.

Test data : APPENDIX 3

Test result : Pass

[Radiated]

Test Procedure

EUT was placed on a platform of nominal size, 0.5m by 0.5m, raised 80cm above the conducting ground plane.

The Radiated Electric Field Strength intensity has been measured in a Semi Anechoic Chamber with a ground plane and at a distance of 3m(Below 10GHz) and 1m(Upper 10GHz).

The height of the measuring varied between 1 and 4m and EUT was rotated a full revolution in order to obtain the maximum value of the electric field intensity.

The measurements were performed for both vertical and horizontal antenna polarization with the Test Receiver, or the Spectrum Analyzer (in linear mode).

The test was made with the detector (RBW/VBW) in the following table.

When using Spectrum analyzer, the test was made with adjusting span to zero by using peak hold.

***Delta Marker Method (Measurement for Band-edge)**

STEP 1) Perform an in-band field strength measurement of the fundamental emission using the RBW table below.

STEP 2) Choose a spectrum analyzer span that encompasses both the peak of the fundamental emission and the band-edge emission under investigation. Set the analyzer RBW to 1% of the total span, and measure the amplitude delta between the peak of the fundamental and the peak of the band-edge emission.

STEP 3) Subtract the delta measured in STEP 2) from the field strengths measured in STEP 1). The result is the field strength of band-edge.

In any 100kHz bandwidth outside the frequency band in which the spread spectrum intentional radiator is operating, the radio frequency power that is produced by the intentional radiator confirmed 20dB below that in the 100kHz bandwidth within the band that contains the highest level of the desired power, based on a radiated measurement.

20dBc was applied to the frequency over the limit of FCC 15.209 and outside the restricted band of 15.205.

Frequency	Below 1GHz	Above 1GHz
Instrument used	Test Receiver / Spectrum Analyzer	Spectrum Analyzer
Detector	QP: BW 120kHz(T/R)	PK: RBW:1MHz/VBW: 1MHz
IF Bandwidth	20dBc : RBW: 100kHz VBW: 300kHz (S/A)	AV: RBW:1MHz/VBW:10Hz 20dBc : RBW:100kHz/VBW:300kHz

- The carrier level and noise levels were confirmed at each position of X, Y and Z axes of EUT to see the position of maximum noise, and the test was made at the position that has the maximum noise.

Test data : APPENDIX 3

Test result : Pass

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SECTION 7: Bandwidth

Test Procedure

The bandwidth was measured with a spectrum analyzer connected to the antenna port.

Test data	: APPENDIX 3
Test result	: Pass

SECTION 8: Maximum Peak Output Power

Test Procedure

The Maximum Peak Output Power was measured with a spectrum analyzer connected to the antenna port.

Test data	: APPENDIX 3
Test result	: Pass

SECTION 9: Carrier Frequency Separation

Test Procedure

The carrier frequency separation was measured with a spectrum analyzer connected to the antenna port.

Test data	: APPENDIX 3
Test result	: Pass

SECTION 10: Number of Hopping Frequency

Test Procedure

The Number of Hopping Frequency was measured with a spectrum analyzer connected to the antenna port.

Test data	: APPENDIX 3
Test result	: Pass

SECTION 11: Dwell time

Test Procedure

The Dwell time was measured with a spectrum analyzer connected to the antenna port.

Test data	: APPENDIX 3
Test result	: Pass

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APPENDIX 2:Test instruments

EMI test equipment

Control No.	Instrument	Manufacturer	Model No	Test Item	Calibration Date * Interval(month)
MAEC-02	Anechoic Chamber	TDK	Semi Anechoic Chamber 3m	RE/CE	2005/04/11 * 12
MTR-01	Test Receiver	Rohde & Schwarz	ES140	RE	2004/11/12 * 12
MBA-02	Biconical Antenna	Schwarzbeck	BBA9106	RE	2004/10/14 * 12
MLA-02	Logperiodic Antenna	Schwarzbeck	USLP9143	RE	2004/10/14 * 12
MCC-12	Coaxial Cable	Fujikura/Agilent	-	RE	2005/02/24 * 12
MAT-07	Attenuator(6dB)	Weinschel Corp	2	RE	2004/12/16 * 12
MPA-07 Gain50	Pre Amplifier	UNITEK ELECTROBICS INC.	Amp1G	RE	2004/10/10 * 12
MPA-01	Pre Amplifier	Agilent	8449B	RE	2005/02/05 * 12
MCC-04	Microwave Cable 1G-50GHz	Storm	421-011 (90-1394-079)	RE	2005/01/05 * 12
MCC-19	Microwave Cable 1G-26.5GHz	Suhner	SUCOFLEX 104	RE	2005/02/03 * 12
MHF-02	High Pass Filter	Tokimec	TF323DCA	RE	2004/09/18 * 12
MHA-02	Horn Antenna	EMCO	3160-09	RE	2005/01/10 * 12
MHA-06	Horn Antenna	Schwarzbeck	BBHA9120D	RE	2005/01/10 * 12
MBTR10	Spectrum Analyzer	Rohde & Schwarz	FSP30	AT	2004/11/02 * 12
MCC-15	Microwave Cable	Suhner	SUCOFLEX 104	AT	2005/02/03 * 12
MDPS-04	DC Power Supply	KENWOOD TMI	PW18-1.3AT	AT	Pre Check
MRENT-21	Spectrum Analyzer	Advantest	R3273	CE	2005/08/19 * 12
MTR-02	Test Receiver	Rohde & Schwarz	ESCS30	CE	2005/02/02 * 12
MCC-13	Coaxial Cable	Fujikura/Agilent	-	CE	2005/02/24 * 12
MLS-06	LISN(AMN)	Schwarzbeck	NSLK8127	CE	2005/02/04 * 12

All equipment is calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

Test Item :

CE: Conducted emission

RE: Radiated emission,

AT: Antenna terminal disturbance voltage

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APPENDIX 3: Data of EMI test

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 703SHF
Serial No. : 004400/01/056817/6

Report No. : 25KE0218-HO
Power : DC3.7V (Adapter:AC120V)
Temp°C/Humi% : 27deg. C / 55%
Operator : Norihisa Hashimoto

Mode / Remarks : Bluetooth Tx2402MHz DH5

LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

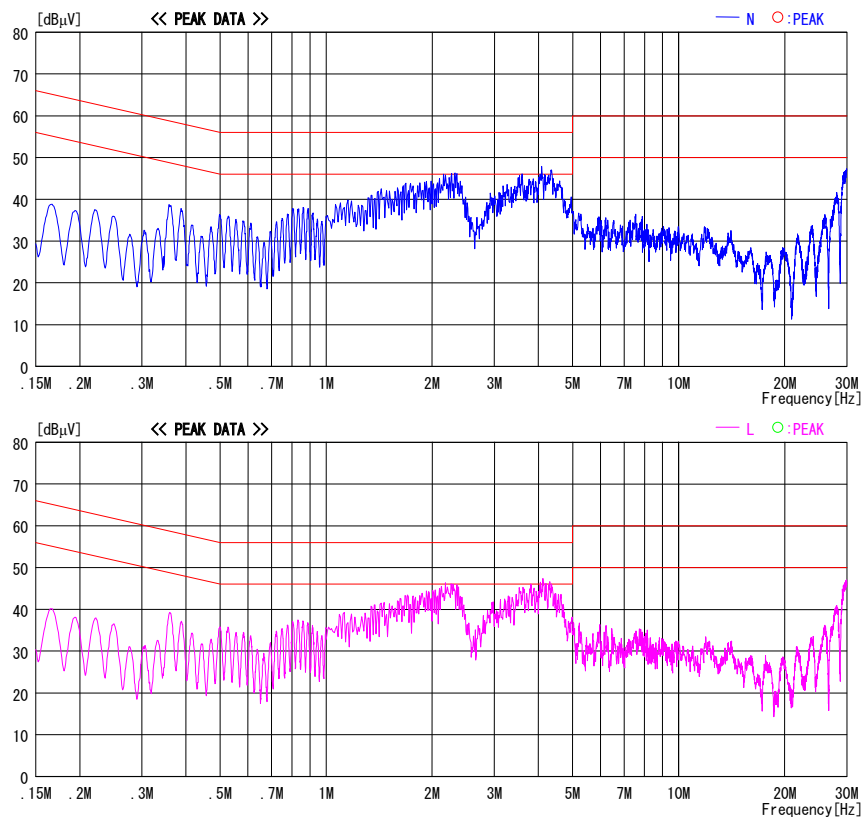


CHART: WITH FACTOR, Peak hold data. Data is uncorrected. CALCULATION: RESULT=READING+C.F.(LISN LOSS+CABLE LOSS)
Except for the above table: adequate margin data below the limits.

Conducted Emission

DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 703SHF
Serial No. : 004400/01/056817/6
Report No. : 25KE0218-HO
Power : DC3.7V (Adapter:AC120V)
Temp°C/Humi% : 27deg. C / 55%
Operator : Norihisa Hashimoto
Mode / Remarks : Bluetooth Tx2441MHz DH5
LIMIT : FCC15C §15.207 (QP)
FCC15C §15.207 (AV)

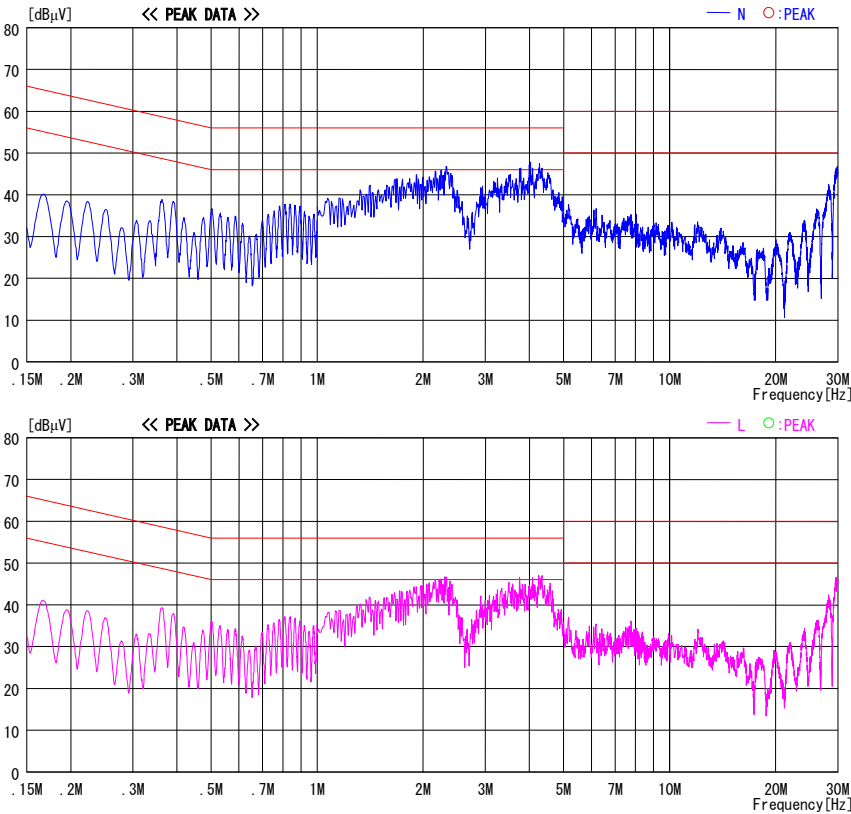


CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

Conducted Emission

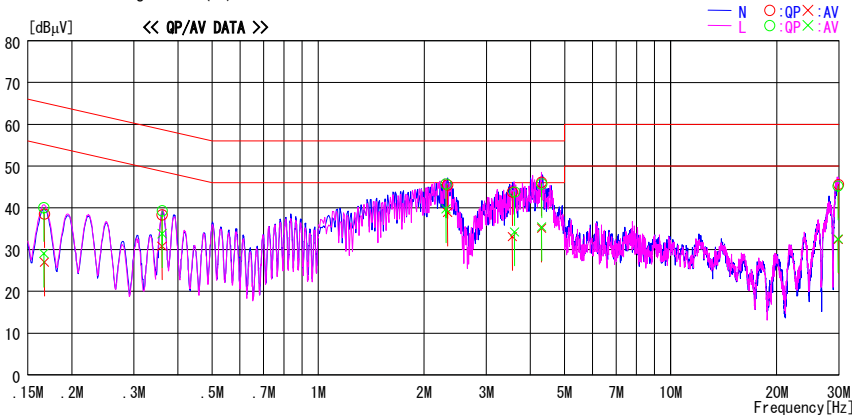
DATA OF CONDUCTED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 703SHF
Serial No. : 004400/01/056817/6
Report No. : 25KE0218-HO
Power : DC3.7V (Adapter:AC120V)
Temp°C/Humi% : 27deg. C / 55%
Operator : Norihisa Hashimoto

Mode / Remarks : Bluetooth Tx2480MHz DH5

LIMIT : FCC15C § 15.207 (QP)
FCC15C § 15.207 (AV)



Frequency	Reading Level		Corr.	Results		Limit		Margin		Phase
	QP	AV		QP	AV	QP	AV	QP	AV	
[MHz]	[dBμV]	[dBμV]	Factor	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	[dBμV]	
0.16712	38.4	26.9	0.1	38.5	27.0	65.1	55.1	26.6	28.1	N
0.36050	38.2	30.7	0.1	38.3	30.8	58.7	48.7	20.4	17.9	N
2.33130	45.0	38.4	0.5	45.5	38.9	56.0	46.0	10.5	7.1	N
3.55470	43.2	32.5	0.6	43.8	33.1	56.0	46.0	12.2	12.9	N
4.30463	45.4	34.4	0.7	46.1	35.1	56.0	46.0	9.9	10.9	N
29.91976	43.4	30.2	2.2	45.6	32.4	60.0	50.0	14.4	17.6	N
0.16661	39.9	29.0	0.1	40.0	29.1	65.1	55.1	25.1	26.0	L
0.36105	39.2	33.7	0.1	39.3	33.8	58.7	48.7	19.4	14.9	L
2.30692	45.2	39.2	0.5	45.7	39.7	56.0	46.0	10.3	6.3	L
3.60906	43.2	33.6	0.6	43.8	34.2	56.0	46.0	12.2	11.8	L
4.30820	45.0	34.7	0.7	45.7	35.4	56.0	46.0	10.3	10.6	L
29.84200	43.0	30.3	2.2	45.2	32.5	60.0	50.0	14.8	17.5	L

CHART:WITH FACTOR,Peak hold data.Data is uncorrected. CALCURATION:RESULT=READING+C.F(LISN LOSS+CABLE LOSS)
Except for the above table : adequate margin data below the limits.

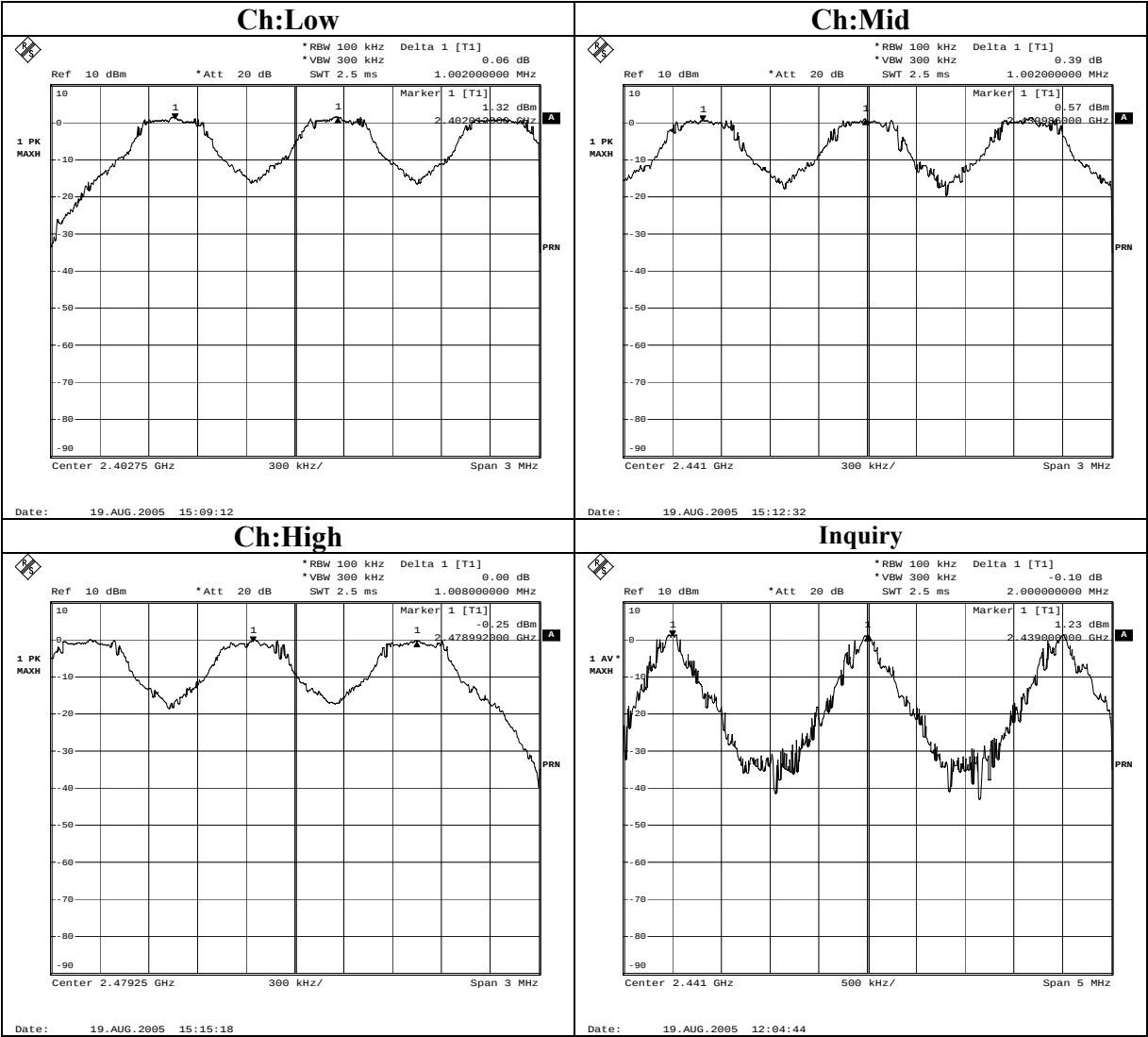
Carrier Frequency Separation

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: GSM & WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 703SHf	DATE	: 08/19/2005
S/ N	: 004400/01/056813/5	TEMPERATURE	: 23deg.C
POWER	: DC 3.7V	HUMIDITY	: 60%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Kenichi Adachi

Ch	Freq. [MHz]	Channel separation [MHz]	Limit
Low	2402.0	1.002	>20dB Bandwidth and 25[kHz]
Mid	2441.0	1.002	>20dB Bandwidth and 25[kHz]
High	2480.0	1.008	>20dB Bandwidth and 25[kHz]
Inquiry	2441.0	2.000	>20dB Bandwidth and 25[kHz]

Carrier Frequency Separation



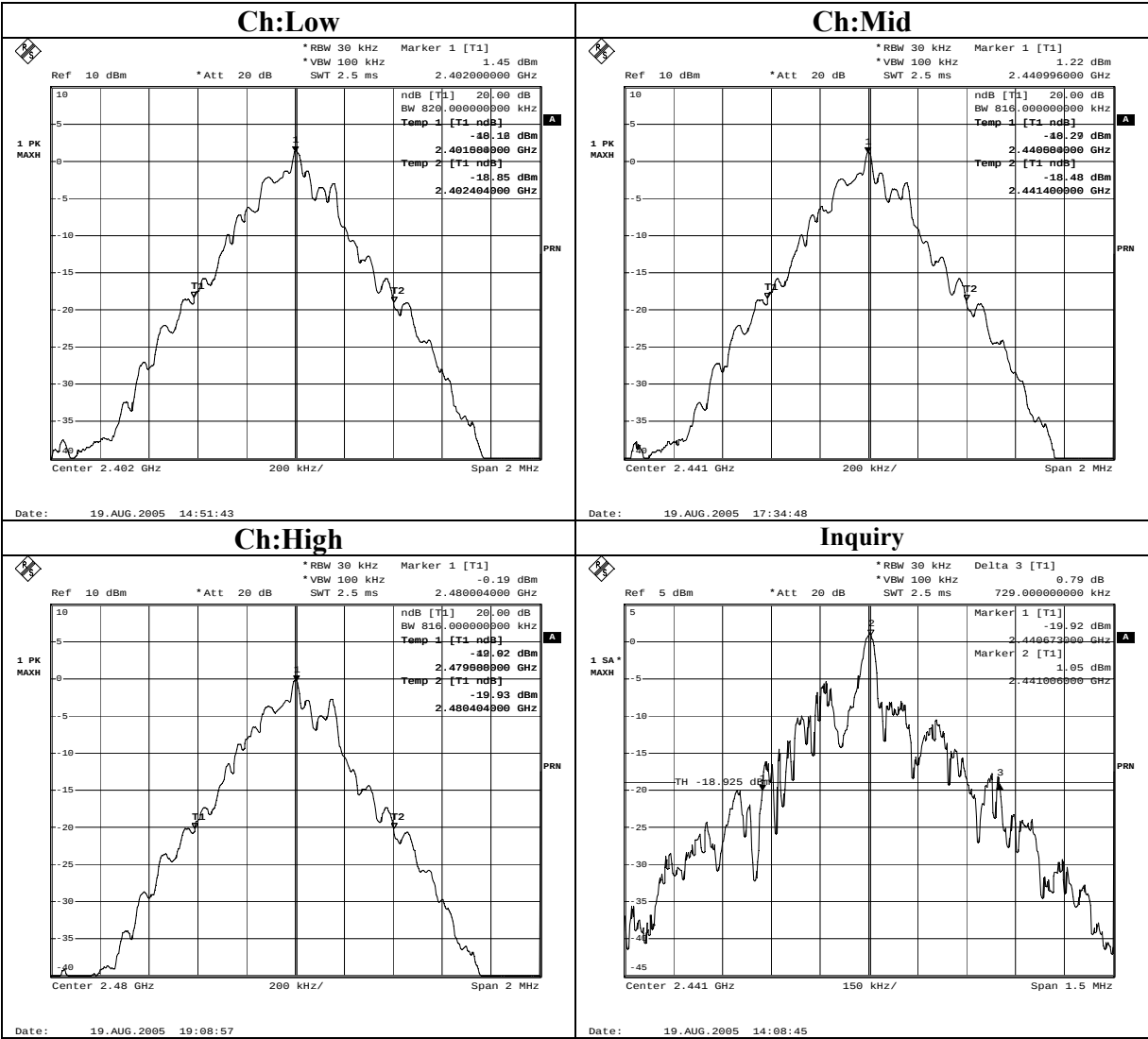
20dB Bandwidth

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)
EQUIPMENT	: GSM & WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 703SHf	DATE	: 08/19/2005
S/ N	: 004400/01/056813/5	TEMPERATURE	: 23deg.C
POWER	: DC 3.7V	HUMIDITY	: 60%
MODE	: Tx(Hopping off)/Inquiry	ENGINEER	: Kenichi Adachi

Ch	Freq.	20dB Bandwidth	Limit
	[MHz]	[MHz]	[MHz]
Low	2402.0	0.820	-
Mid	2441.0	0.816	-
High	2480.0	0.816	-
Inquiry	2441.0	0.729	-

20dB Bandwidth



Number of Hopping Frequency

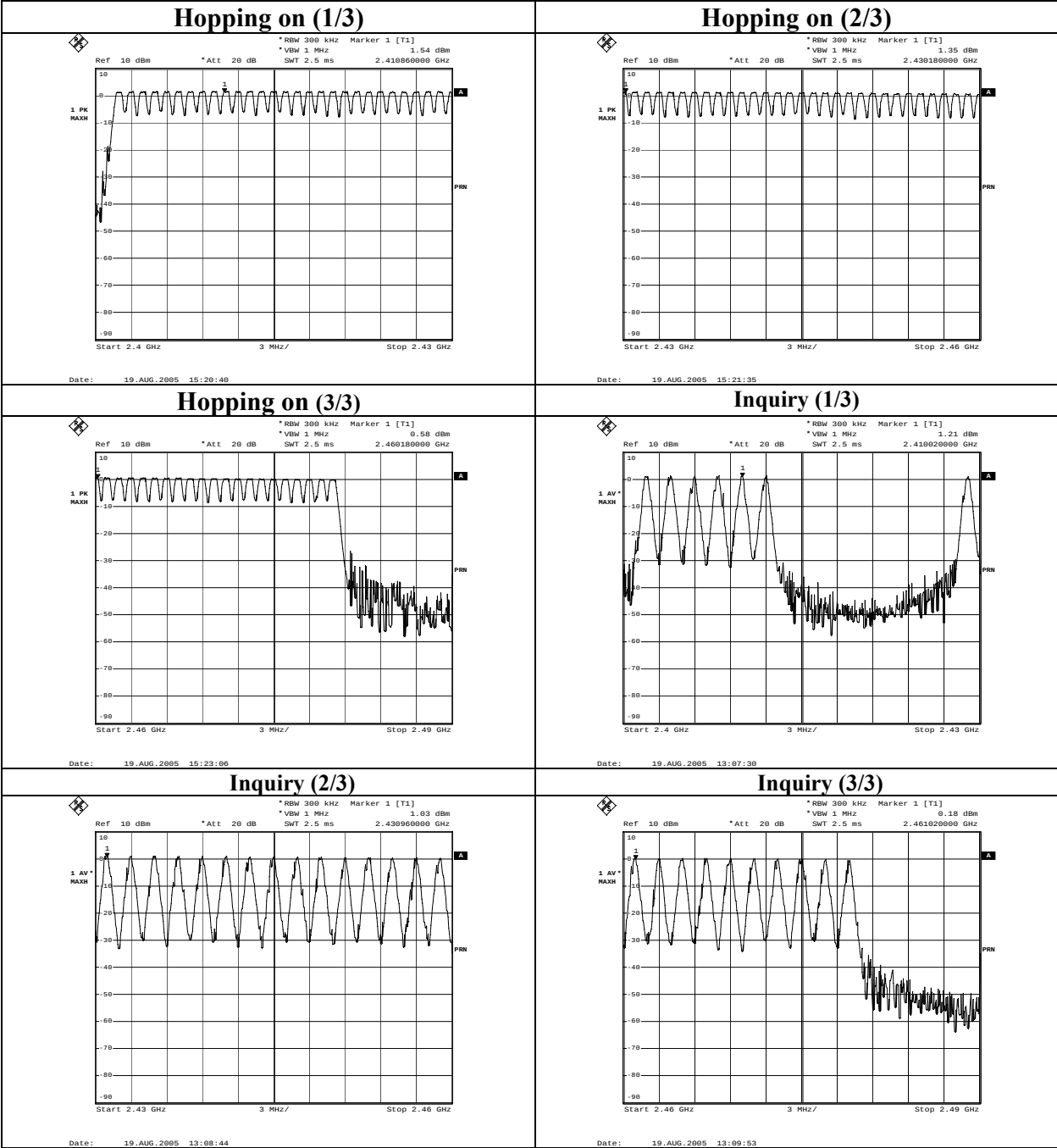
UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: GSM & WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 703SHf	DATE	: 08/19/2005
S/ N	: 004400/01/056813/5	TEMPERATURE	: 23deg.C
POWER	: DC 3.7V	HUMIDITY	: 60%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Kenichi Adachi

Mode	Number of channel [time]	Limit [time]
Tx(Hoppng on)	79	≥ 15

Mode	Number of channel [time]	Limit [time]
Inquiry	32	≥ 15

Number of Hopping Frequency



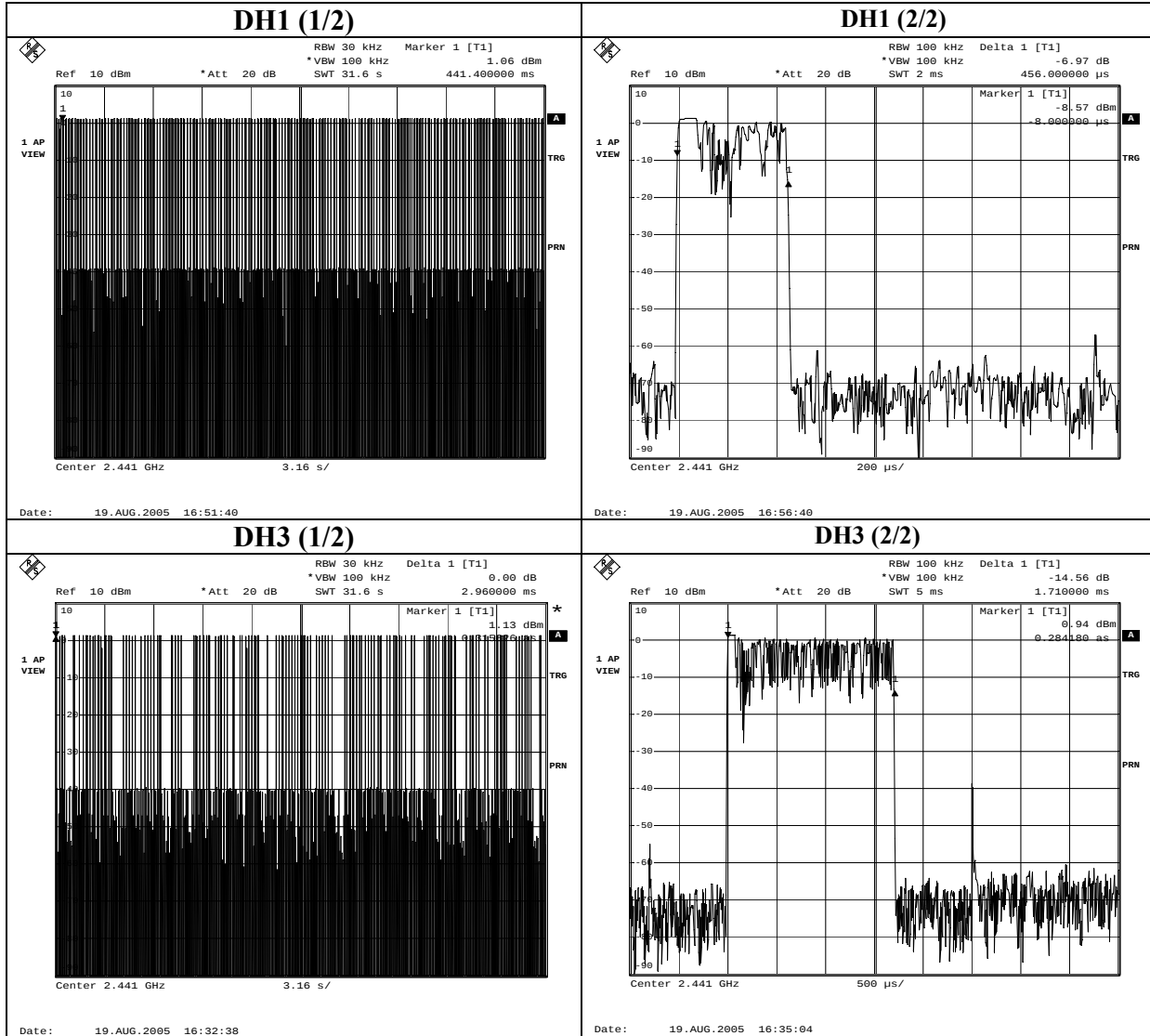
Dwell time

Head Office EMC Lab. No.3 Shielded Room

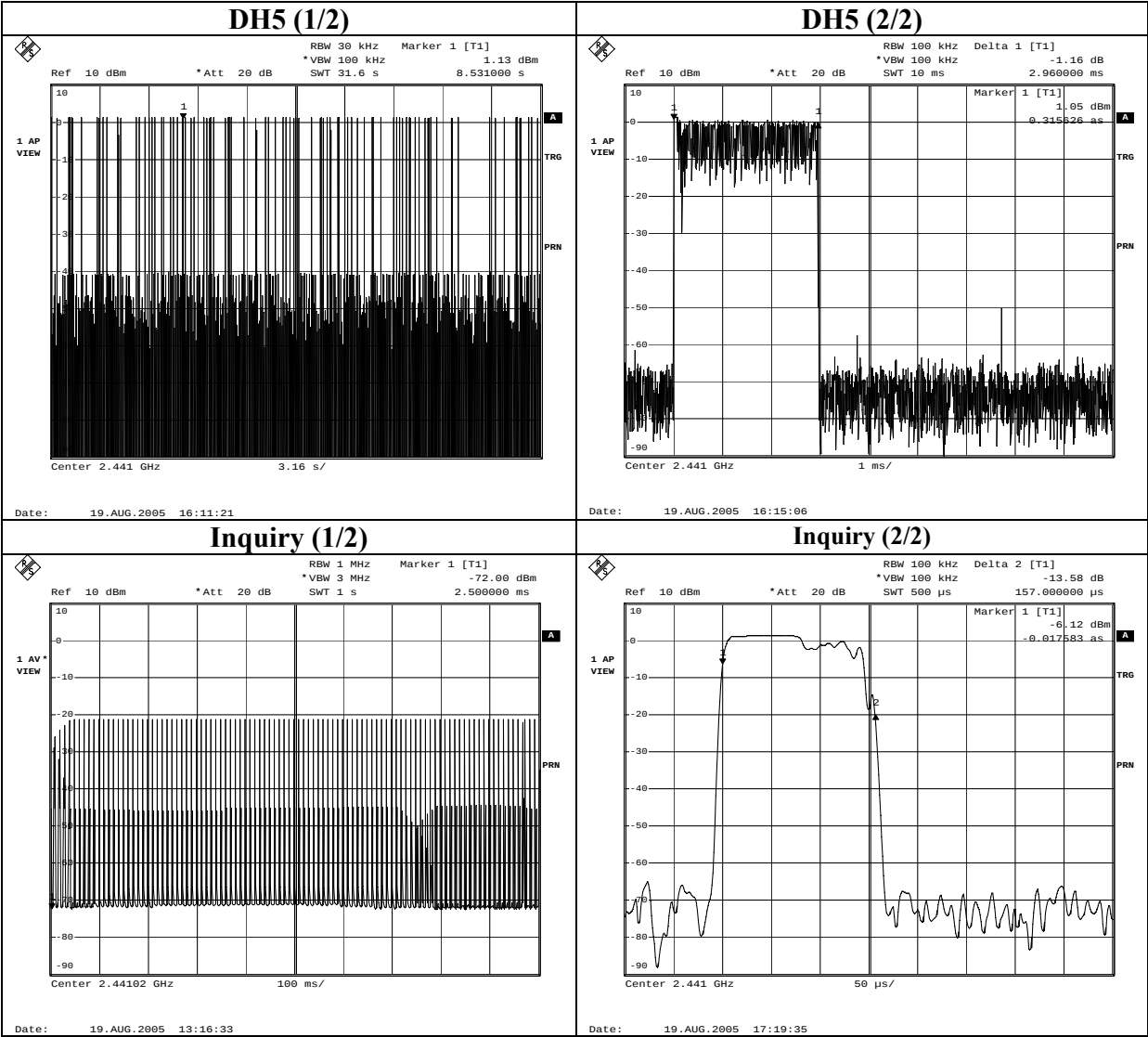
COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(a)(1)(iii)
EQUIPMENT	: GSM & WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 703SHf	DATE	: 08/19/2005
S/ N	: 004400/01/056813/5	TEMPERATURE	: 23deg.C
POWER	: DC 3.7V	HUMIDITY	: 60%
MODE	: Tx(Hopping on)/Inquiry	ENGINEER	: Kenichi Adachi

Mode	Number of transmission in a 31.6(79 Hopping x 0.4) / 12.8(32 Hopping x 0.4)second period	Length of transmission time [msec]	Result [msec]	Limit [msec]
DH1	268 times / 31.6 sec. x 31.6 = 268 times	0.456	122	400
DH3	160 times / 31.6 sec. x 31.6 = 160 times	1.710	274	400
DH5	101 times / 31.6 sec. x 31.6 = 101 times	2.960	299	400
Inquiry	100 times / 1sec. x 12.8 = 1280 times	0.157	201	400

Dwell time



Dwell time



Maximum Peak Output Power

UL Apex Co., Ltd.
Head Office EMC Lab. No.3 Shielded Room

COMPANY	: Sharp Corporation	REGULATION	: Fcc Part15 Subpart C 15.247(b)(1)
EQUIPMENT	: GSM & WCDMA Cellular Phone	TEST DISTANCE	: -
MODEL	: 703SHf	DATE	: 08/19/2005
S/ N	: 004400/01/056813/5	TEMPERATURE	: 23deg.C
POWER	: DC 3.7V	HUMIDITY	: 60%
MODE	: Tx(Hopping off)/Inquiry	ENGINEER	: Kenichi Adachi

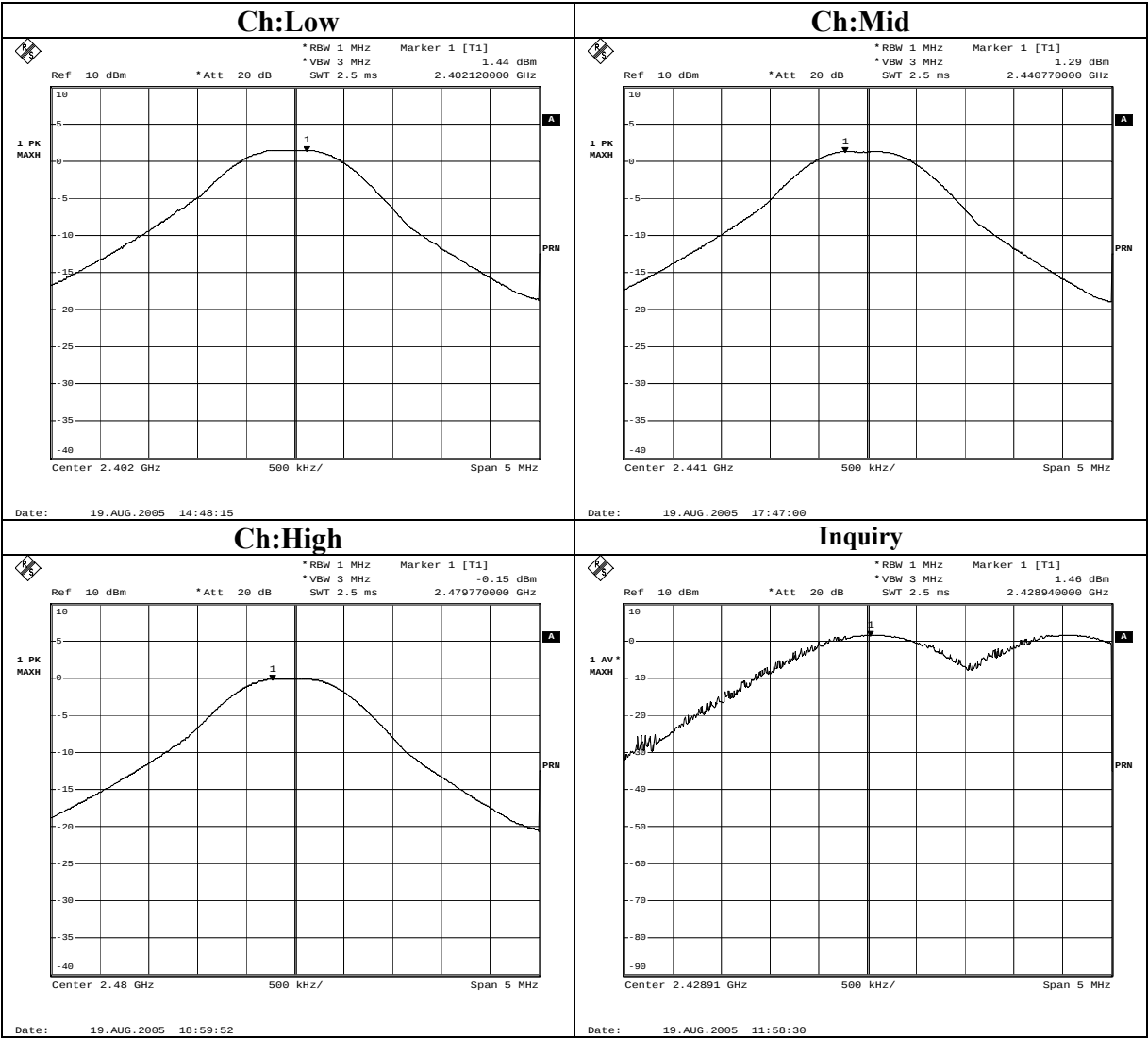
Ch	Freq. [MHz]	S/A Reading [dBm]	Cable Loss [dB]	Atten. [dB]	Result [dBm]	Limit (0.125W) [dBm]	Margin [dB]
Low	2402.0	1.44	0.44	0.00	1.88	20.96	19.08
Mid	2441.0	1.29	0.37	0.00	1.66	20.96	19.30
High	2480.0	-0.15	0.40	0.00	0.25	20.96	20.71
Inquiry	2428.9	1.46	0.39	0.00	1.85	20.96	19.11

Sample Calculation:

Result = Reading + Cable Loss + Attenuator

* In the above table, factor 0.0dB represents no use of Atten. and/or Filter.

Maximum Peak Output Power



Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

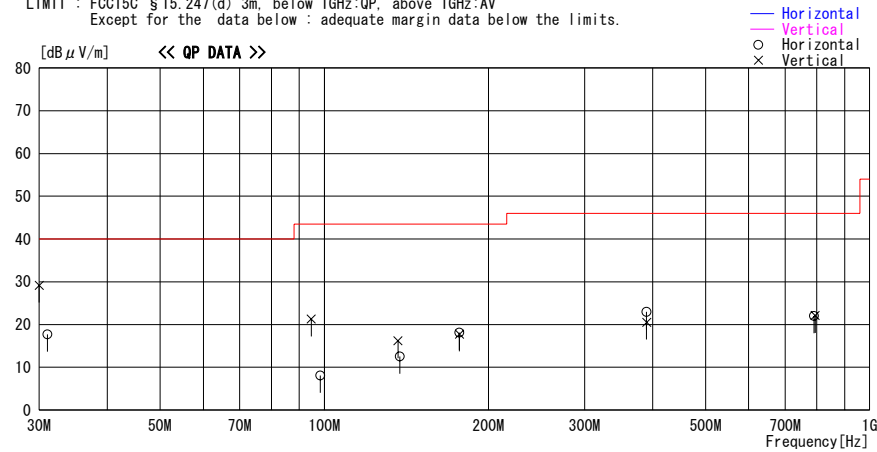
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Sharp Corporation Report No. : 25KE0218-HO
Kind of EUT : GSM & WCDMA Cellular Phone Power : DC3.7V (Adapter:AC120V)
Model No. : 703SHF Temp./Humi. : 25deg.C / 57%
Serial No. : 004400/01/056817/6 Operator : Norihisa Hashimoto

Mode / Remarks : Bluetooth Tx2402MHz DH5 (Z-MaxAxis)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
31.082	44.3	QP	18.6	-45.2	17.7	72	342	Hori.	40.0	22.3
30.000	55.2	QP	19.2	-45.2	29.2	255	100	Vert	40.0	10.8
94.610	56.2	QP	9.5	-44.4	21.3	184	100	Vert	43.5	22.2
98.291	42.3	QP	10.1	-44.3	8.1	168	108	Hori.	43.5	35.4
137.600	42.2	QP	14.4	-44.1	12.5	4	133	Hori.	43.5	31.0
136.490	45.8	QP	14.4	-44.0	16.2	275	109	Vert	43.5	27.3
176.953	44.8	QP	16.8	-43.8	17.8	107	106	Vert	43.5	25.7
176.939	45.1	QP	16.8	-43.8	18.1	197	100	Hori.	43.5	25.4
389.989	47.2	QP	18.3	-42.5	23.0	160	100	Hori.	46.0	23.0
389.990	44.7	QP	18.3	-42.5	20.5	209	125	Vert	46.0	25.5
794.564	40.7	QP	21.9	-40.5	22.1	278	146	Vert	46.0	23.9
789.834	40.8	QP	21.9	-40.7	22.0	10	199	Hori.	46.0	24.0

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
Except for the data below : adequate margin data below the limits.
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP. GAIN

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

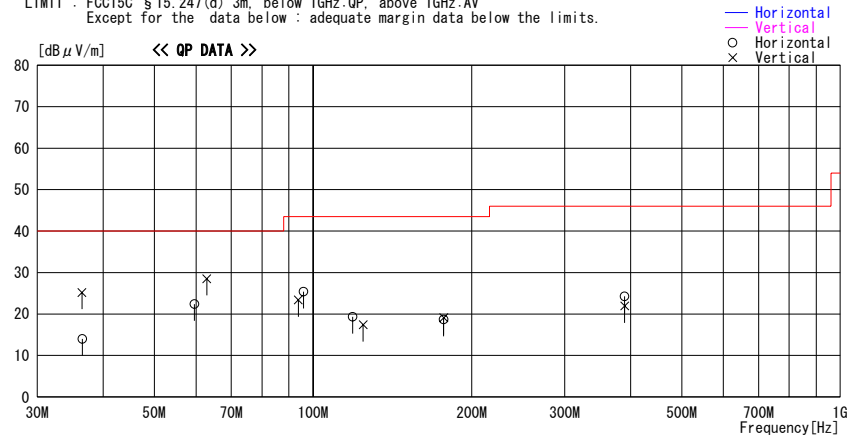
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No.2 Semi Anechoic Chamber

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 703SHf
Serial No. : 004400/01/056817/6
Report No. : 25KE0218-HO
Power : DC3.7V (Adapter:AC120V)
Temp./Humi. : 25deg.C / 57%
Operator : Norihisa Hashimoto

Mode / Remarks : Bluetooth Tx2441MHz DH5 (Z-MaxAxis)

LIMIT : FCC15C §15.247(d) 3m. below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	
			Factor	Gain						
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
36.468	54.8	QP	15.6	-45.2	25.2	4	100	Vert.	40.0	14.8
36.523	43.6	QP	15.6	-45.2	14.0	106	270	Hori.	40.0	26.1
62.865	65.5	QP	7.8	-44.8	28.5	186	100	Vert.	40.0	11.5
59.574	58.9	QP	8.3	-44.8	22.4	323	400	Hori.	40.0	17.6
95.982	60.1	QP	9.7	-44.4	25.4	131	326	Hori.	43.5	18.1
93.777	58.5	QP	9.3	-44.4	23.4	317	100	Vert.	43.5	20.1
118.858	50.5	QP	13.0	-44.2	19.3	354	284	Hori.	43.5	24.2
124.489	47.2	QP	13.5	-43.3	17.4	160	100	Vert.	43.5	26.1
176.944	45.7	QP	16.8	-43.8	18.7	261	100	Hori.	43.5	24.8
176.939	46.1	QP	16.8	-43.8	19.1	131	100	Vert.	43.5	24.4
389.986	46.1	QP	18.3	-42.5	21.9	232	126	Vert.	46.0	24.1
389.994	48.5	QP	18.3	-42.5	24.3	174	100	Hori.	46.0	21.7

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
Except for the data below : adequate margin data below the limits.
CALCULATION : READING + ANT FACTOR + LOSS(CABLE+ATTEN.) - AMP.GAIN

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

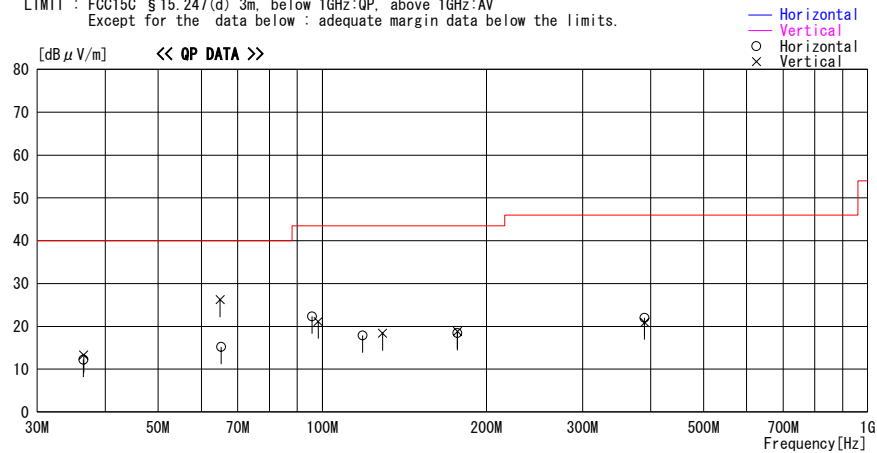
DATA OF RADIATED EMISSION TEST

UL Apex Co., Ltd. Head Office EMC Lab. No. 2 Semi Anechoic Chamber

Applicant : Sharp Corporation
Kind of EUT : GSM & WCDMA Cellular Phone
Model No. : 703SHf
Serial No. : 004400/01/056817/6
Report No. : 25KE0218-HO
Power : DC3.7V (Adapter:AC120V)
Temp./Humi. : 25deg.C / 57%
Operator : Norihisa Hashimoto

Mode / Remarks : Bluetooth Tx2480MHz DH5 (Z-MaxAxis)

LIMIT : FCC15C §15.247(d) 3m, below 1GHz:QP, above 1GHz:AV
Except for the data below : adequate margin data below the limits.



Frequency	Reading	DET	Antenna	Loss&	Level	Angle	Height	Polar.	Limit	Margin
			Factor	Gain						
[MHz]	[dBuV]		[dB/m]	[dB]	[dBuV/m]	[Deg]	[cm]		[dBuV/m]	[dB]
36.516	42.9	QP	15.6	-45.2	13.3	358	100	Vert.	40.0	26.7
36.460	41.8	QP	15.6	-45.2	12.2	100	214	Hori.	40.0	27.8
65.270	52.5	QP	7.5	-44.8	15.2	226	363	Hori.	40.0	24.8
64.976	63.5	QP	7.5	-44.8	26.2	181	100	Vert.	40.0	13.8
98.295	55.3	QP	10.1	-44.3	21.1	344	119	Vert.	43.5	22.4
95.842	57.0	QP	9.7	-44.4	22.3	158	248	Hori.	43.5	21.2
118.548	49.2	QP	12.9	-44.2	17.9	333	264	Hori.	43.5	25.6
128.969	47.7	QP	13.8	-43.1	18.4	107	133	Vert.	43.5	25.1
176.939	45.4	QP	16.8	-43.8	18.4	9	100	Hori.	43.5	25.1
176.937	45.8	QP	16.8	-43.8	18.8	350	100	Vert.	43.5	24.7
389.986	46.2	QP	18.3	-42.5	22.0	177	288	Hori.	46.0	24.0
389.994	45.1	QP	18.3	-42.5	20.9	205	114	Vert.	46.0	25.1

CHART:WITH FACTOR ANT TYPE : -30MHz LOOP, 30-300MHz BICONICAL, 300MHz-1000MHz LOGPERIODIC, 1000MHz- HORN
Except for the data below : adequate margin data below the limits.
CALCULATION : READING + ANT FACTOR + LOSS (CABLE+ATTEN.) - AMP. GAIN

Test report No. : 25KE0218-HO-1b
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Issued date : August 26, 2005
Revised date : September 22, 2005
FCC ID : APYHRO00043

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

DATA OF SPURIOUS EMISSIONS(1GHz to 26GHz)

Company : Sharp Corporation
Equipment : GSM & WCDMA Cellular Phone
Model : 703SHF
Sample No. : 004400/01/056817/6
Power : DC3.7V
Mode : Tx 2402MHz DH5
Remarks : Hor X , Ver Z-axis
PK DETECT (RBW: 1MHz, VBW: 1MHz)

UL Apex Co., Ltd.
REPORT NO : 25KE0218-HO
REGULATION : Fcc Part15 Subpart C 15.247(d)
TEST DISTANCE : 3/1m
DATE : 08/18/2005
TEMPERATURE : 25deg.C
HUMIDITY : 57%
ENGINEER : Norihisa Hashimoto

Head Office EMC Lab. No.2 Semi Anechoic Chamber

No.	FREQ	S/A READING		ANT Factor	AMP GAIN	CABLE LOSS	Hi-Pass Filter	RESULT		Limit PK	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
	[MHz]	[dBuV]		[dB/m]	[dB]	[dB]	[dB]	[dBuV/m]		[dBuV/m]	[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	61.8	64.9	30.5	36.4	3.7	0.0	59.6	62.7	74.0	14.4	11.3
2	4804.0	44.3	44.7	35.2	36.0	5.3	1.0	49.8	50.2	74.0	24.2	23.8
3	7206.0	43.7	45.1	37.7	36.1	6.6	0.4	52.3	53.7	74.0	21.7	20.3
4	9608.0	43.7	47.2	37.0	36.4	7.9	0.1	52.3	55.8	74.0	21.7	18.2
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12010.0	52.0	51.8	41.6	36.1	9.5	0.1	57.6	57.4	74.0	16.4	16.6
6	14412.0	50.5	50.6	41.7	34.6	9.7	0.2	58.0	58.1	74.0	16.0	15.9
7	16814.0	49.1	49.5	45.1	35.1	10.7	1.1	61.4	61.8	74.0	12.6	12.2
8	19216.0	43.0	44.0	40.1	34.1	12.0	2.0	53.5	54.5	74.0	20.5	19.5
9	21618.0	44.5	44.3	39.8	34.8	12.0	2.4	54.4	54.2	74.0	19.6	19.8
10	24020.0	44.0	45.0	40.4	35.5	13.9	0.1	53.4	54.4	74.0	20.6	19.6

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2390.0	31.2	30.8	30.5	36.4	3.7	0.0	29.0	28.6	54.0	25.0	25.4
2	4804.0	31.1	31.5	35.2	36.0	5.3	1.0	36.6	37.0	54.0	17.4	17.0
3	7206.0	30.5	31.0	37.7	36.1	6.6	0.4	39.1	39.6	54.0	14.9	14.4
4	9608.0	30.3	34.9	37.0	36.4	7.9	0.1	38.9	43.5	54.0	15.1	10.5
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12010.0	37.8	37.8	41.6	36.1	9.5	0.1	43.4	43.4	54.0	10.6	10.6
6	14412.0	36.9	36.9	41.7	34.6	9.7	0.2	44.4	44.4	54.0	9.6	9.6
7	16814.0	35.9	35.9	45.1	35.1	10.7	1.1	48.2	48.2	54.0	5.8	5.8
8	19216.0	29.7	29.8	40.1	34.1	12.0	2.0	40.2	40.3	54.0	13.8	13.7
9	21618.0	30.8	30.8	39.8	34.8	12.0	2.4	40.7	40.7	54.0	13.3	13.3
10	24020.0	30.9	30.9	40.4	35.5	13.9	0.1	40.3	40.3	54.0	13.7	13.7

20dBc(Fundamental 2402MHz) (RBW: 100kHz, VBW: 300kHz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit 20dBc [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2402.0	98.2	101.3	30.5	36.4	3.7	0.0	96.0	99.1	-	-	-
2	2400.0	60.7	63.6	30.5	36.4	3.7	0.0	58.5	61.4	Funda-20dB	17.5	17.7

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

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MF060b(01.06.05)

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Issued date : August 26, 2005
Revised date : September 22, 2005
FCC ID : APYHRO00043

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

DATA OF SPURIOUS EMISSIONS(1GHz to 26GHz)

Company : Sharp Corporation Equipment : GSM & WCDMA Cellular Phone Model : 703SHf Sample No. : 004400/01/056817/6 Power : DC3.7V Mode : Tx 2441MHz DHS Remarks : Hor X , Ver Z-axis PK DETECT (RBW: 1MHz, VBW: 1MHz)	UL Apex Co., Ltd. REPORT NO : 25KE0218-HO REGULATION : Fcc Part15 Subpart C 15.247(d) TEST DISTANCE : 3/1m DATE : 08/18/2005 TEMPERATURE : 25deg.C HUMIDITY : 57% ENGINEER : Norihisa Hashimoto	Head Office EMC Lab. No.2 Semi Anechoic Chamber : 25KE0218-HO : Fcc Part15 Subpart C 15.247(d) : 3/1m : 08/18/2005 : 25deg.C : 57% : Norihisa Hashimoto
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No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	43.4	44.2	35.6	36.0	5.3	1.0	49.3	50.1	74.0	24.7	23.9
2	7323.0	45.5	43.5	37.9	36.0	6.6	0.5	54.5	52.5	74.0	19.5	21.5
3	9764.0	43.1	44.5	36.8	36.4	8.1	0.2	51.8	53.2	74.0	22.2	20.8
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	50.3	50.6	41.6	36.0	9.8	0.0	56.2	56.5	74.0	17.8	17.5
5	14646.0	51.4	52.0	42.2	35.2	10.1	0.0	59.0	59.6	74.0	15.0	14.4
6	17087.0	49.3	50.5	45.2	34.9	12.0	0.0	62.1	63.3	74.0	11.9	10.7
7	19528.0	43.0	42.8	40.3	34.3	14.3	0.0	53.8	53.6	74.0	20.2	20.4
8	21969.0	45.6	45.4	39.8	34.2	13.0	0.0	54.7	54.5	74.0	19.3	19.5
9	24410.0	44.8	43.3	40.4	35.8	14.6	0.0	54.5	53.0	74.0	19.5	21.0

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	4882.0	30.4	31.9	35.6	36.0	5.3	1.0	36.3	37.8	54.0	17.7	16.2
2	7323.0	30.6	30.6	37.9	36.0	6.6	0.5	39.6	39.6	54.0	14.4	14.4
3	9764.0	30.0	30.1	36.8	36.4	8.1	0.2	38.7	38.8	54.0	15.3	15.2
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
4	12205.0	36.9	36.9	41.6	36.0	9.8	0.0	42.8	42.8	54.0	11.2	11.2
5	14646.0	38.1	38.1	42.2	35.2	10.1	0.0	45.7	45.7	54.0	8.3	8.3
6	17087.0	35.9	35.9	45.2	34.9	12.0	0.0	48.7	48.7	54.0	5.3	5.3
7	19528.0	29.5	29.6	40.3	34.3	14.3	0.0	40.3	40.4	54.0	13.7	13.6
8	21969.0	32.2	32.2	39.8	34.2	13.0	0.0	41.3	41.3	54.0	12.7	12.7
9	24410.0	30.8	30.8	40.4	35.8	14.6	0.0	40.5	40.5	54.0	13.5	13.5

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Fiter was not used for factor 0.0dB of the above table.

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MF060b(01.06.05)

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Revised date : September 22, 2005
FCC ID : APYHRO00043

Radiated Spurious Emission

* The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

DATA OF SPURIOUS EMISSIONS(1GHz to 26GHz)

Company : Sharp Corporation
Equipment : GSM & WCDMA Cellular Phone
Model : 703SHf
Sample No. : 004400/01/056817/6
Power : DC3.7V
Mode : Tx 2480MHz DH5
Remarks : Hor X , Ver Z-axis
PK DETECT (RBW: 1MHz, VBW: 1MHz)

UL Apex Co., Ltd.
REPORT NO : 25KE0218-HO
REGULATION : Fcc Part15 Subpart C 15.247(d)
TEST DISTANCE : 3/1m
DATE : 08/18/2005
TEMPERATURE : 25deg.C
HUMIDITY : 57%
ENGINEER : Norihisa Hashimoto

Head Office EMC Lab. No.2 Semi Anechoic Chamber

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit PK [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	69.5	75.3	30.5	36.4	3.7	0.0	67.3	73.1	74.0	6.7	0.9
2	4960.0	42.6	43.6	36.1	35.9	5.4	1.1	49.3	50.3	74.0	24.7	23.7
3	7440.0	43.8	45.6	38.1	35.9	6.8	0.7	53.5	55.3	74.0	20.5	18.7
4	9920.0	43.7	44.7	36.7	36.5	8.1	0.3	52.3	53.3	74.0	21.7	20.7
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12400.0	51.4	51.7	41.7	35.8	9.9	0.0	57.7	58.0	74.0	16.3	16.0
6	14880.0	50.9	50.3	42.7	36.0	10.4	0.0	58.5	57.9	74.0	15.5	16.1
7	17360.0	49.1	49.0	44.7	35.1	11.9	0.0	61.1	61.0	74.0	12.9	13.0
8	19840.0	42.5	43.0	40.4	34.8	13.7	0.0	52.3	52.8	74.0	21.7	21.2
9	22320.0	45.3	45.2	39.8	34.1	13.3	0.0	54.8	54.7	74.0	19.2	19.3
10	24800.0	43.9	43.5	40.7	35.1	15.3	0.0	55.3	54.9	74.0	18.7	19.1

AV DETECT (RBW: 1MHz, VBW: 10Hz)

No.	FREQ [MHz]	S/A READING		ANT Factor [dB/m]	AMP GAIN [dB]	CABLE LOSS [dB]	Hi-Pass Filter [dB]	RESULT		Limit AV [dBuV/m]	MARGIN	
		HOR	VER					HOR	VER		HOR	VER
		[dBuV]						[dBuV/m]			[dB]	
Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss												
1	2483.5	38.4	44.3	30.5	36.4	3.7	0.0	36.2	42.1	54.0	17.8	11.9
2	4960.0	30.0	30.8	36.1	35.9	5.4	1.1	36.7	37.5	54.0	17.3	16.5
3	7440.0	30.5	33.1	38.1	35.9	6.8	0.7	40.2	42.8	54.0	13.8	11.2
4	9920.0	30.3	32.1	36.7	36.5	8.1	0.3	38.9	40.7	54.0	15.1	13.3
Test distance 1meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss - Dfac												
5	12400.0	38.0	38.0	41.7	35.8	9.9	0.0	44.3	44.3	54.0	9.7	9.7
6	14880.0	37.4	37.4	42.7	36.0	10.4	0.0	45.0	45.0	54.0	9.0	9.0
7	17360.0	35.5	35.5	44.7	35.1	11.9	0.0	47.5	47.5	54.0	6.5	6.5
8	19840.0	29.2	29.2	40.4	34.8	13.7	0.0	39.0	39.0	54.0	15.0	15.0
9	22320.0	31.9	32.0	39.8	34.1	13.3	0.0	41.4	41.5	54.0	12.6	12.5
10	24800.0	30.7	30.7	40.7	35.1	15.3	0.0	42.1	42.1	54.0	11.9	11.9

<AV DETECT 2483.5MHz>

Test distance 3meters RESULT=Reading + ANT Factor - Amp Gain + Cable Loss + Filter Loss + Duty Cycle correction factor

Duty Cycle correction factor = -30.5dB

Test Distance 1.0m : Distance Factor(Dfac) = 20log(3/1.0) = 9.5dB

*Except for the above table : All other spurious emissions were less than 20dB for the limit.

*In the frequency over the fifth harmonic, the noise from the EUT was not seen. The data above is its base noise.

*The result is rounded off to the second decimal place. Therefore, there may be 0.1 difference for the result.

*Hi-Pass Filter was not used for factor 0.0dB of the above table.

UL Apex Co., Ltd.

Head Office EMC Lab.

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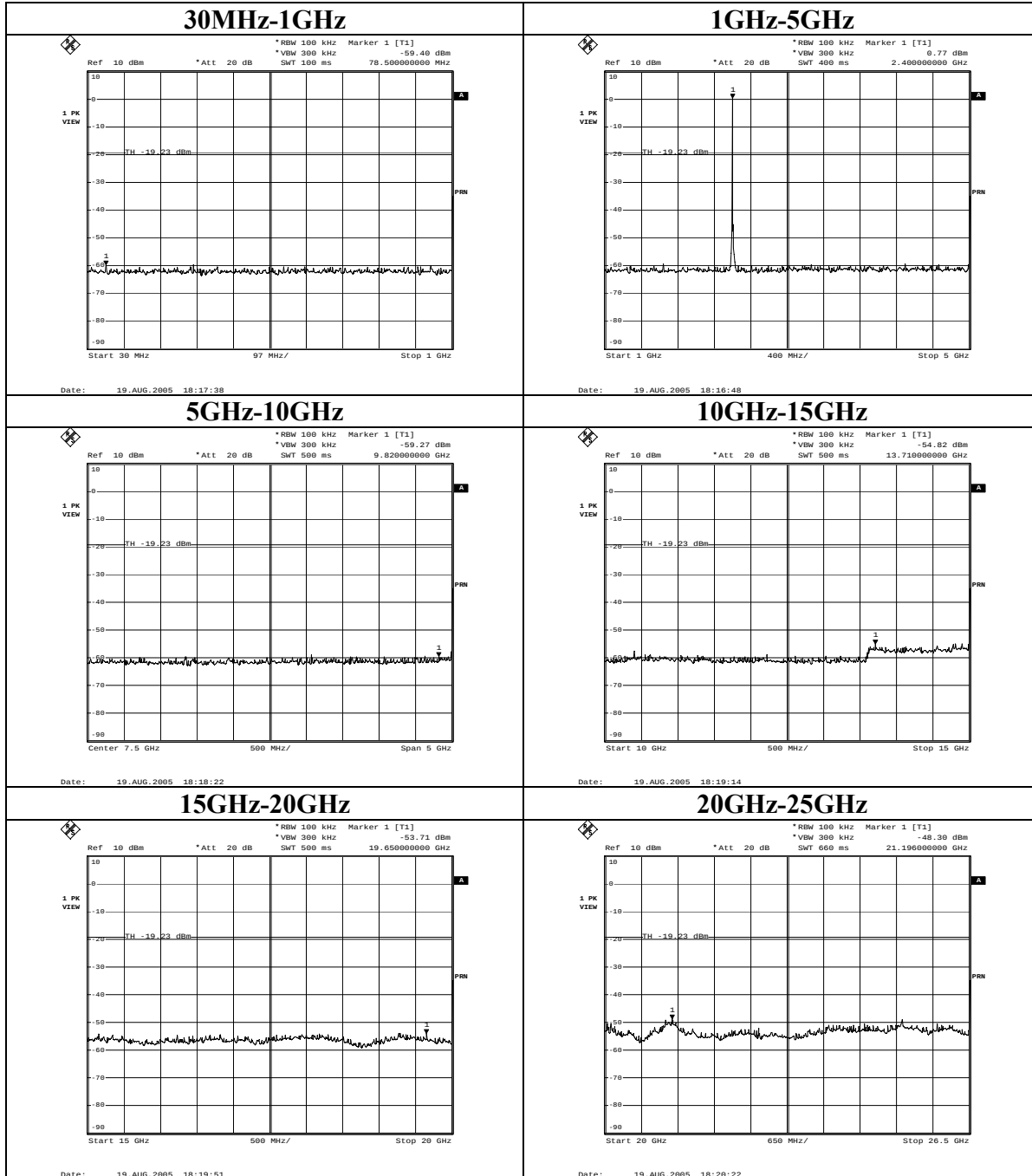
Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

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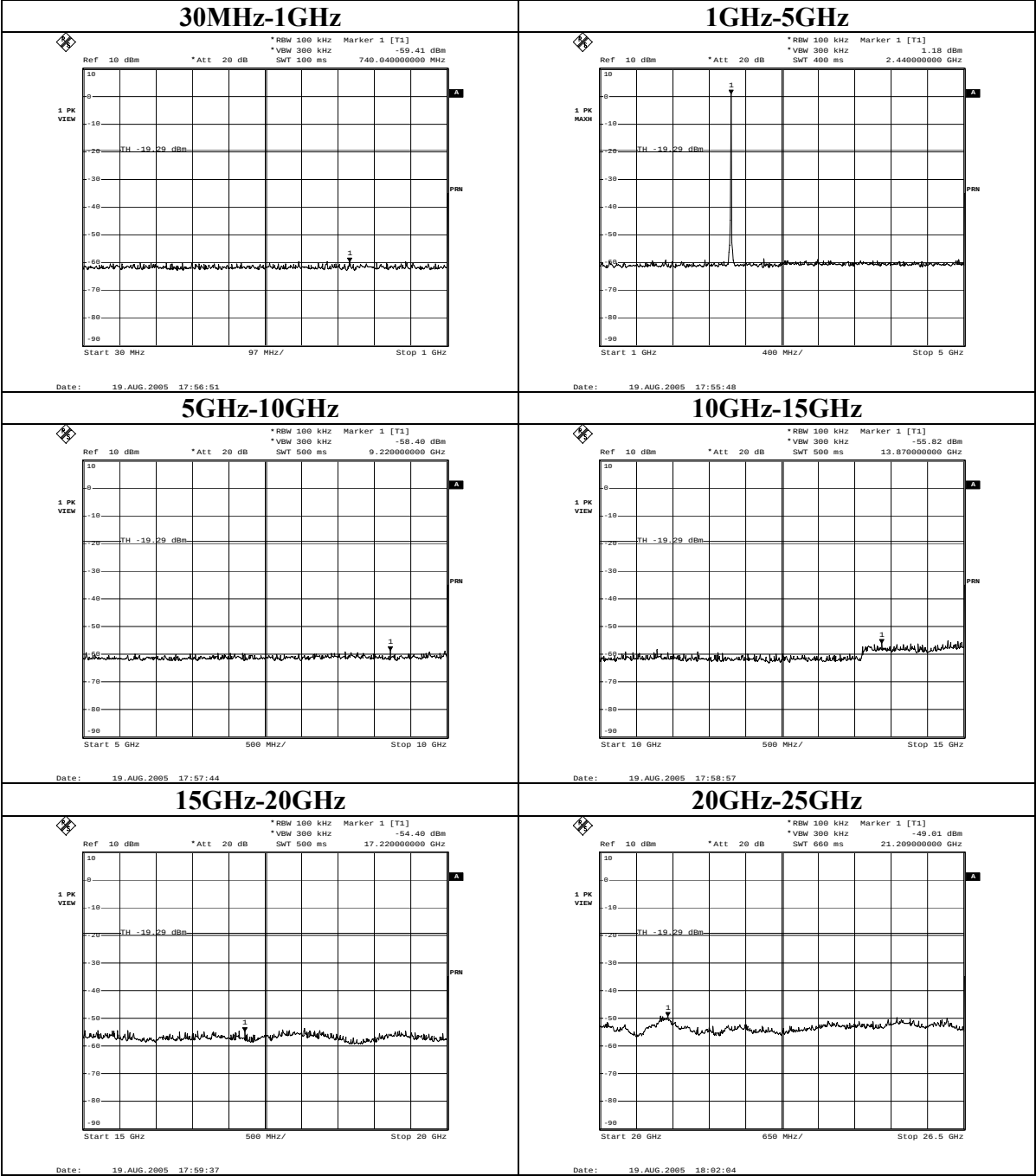
Conducted Spurious Emission

Ch:Low



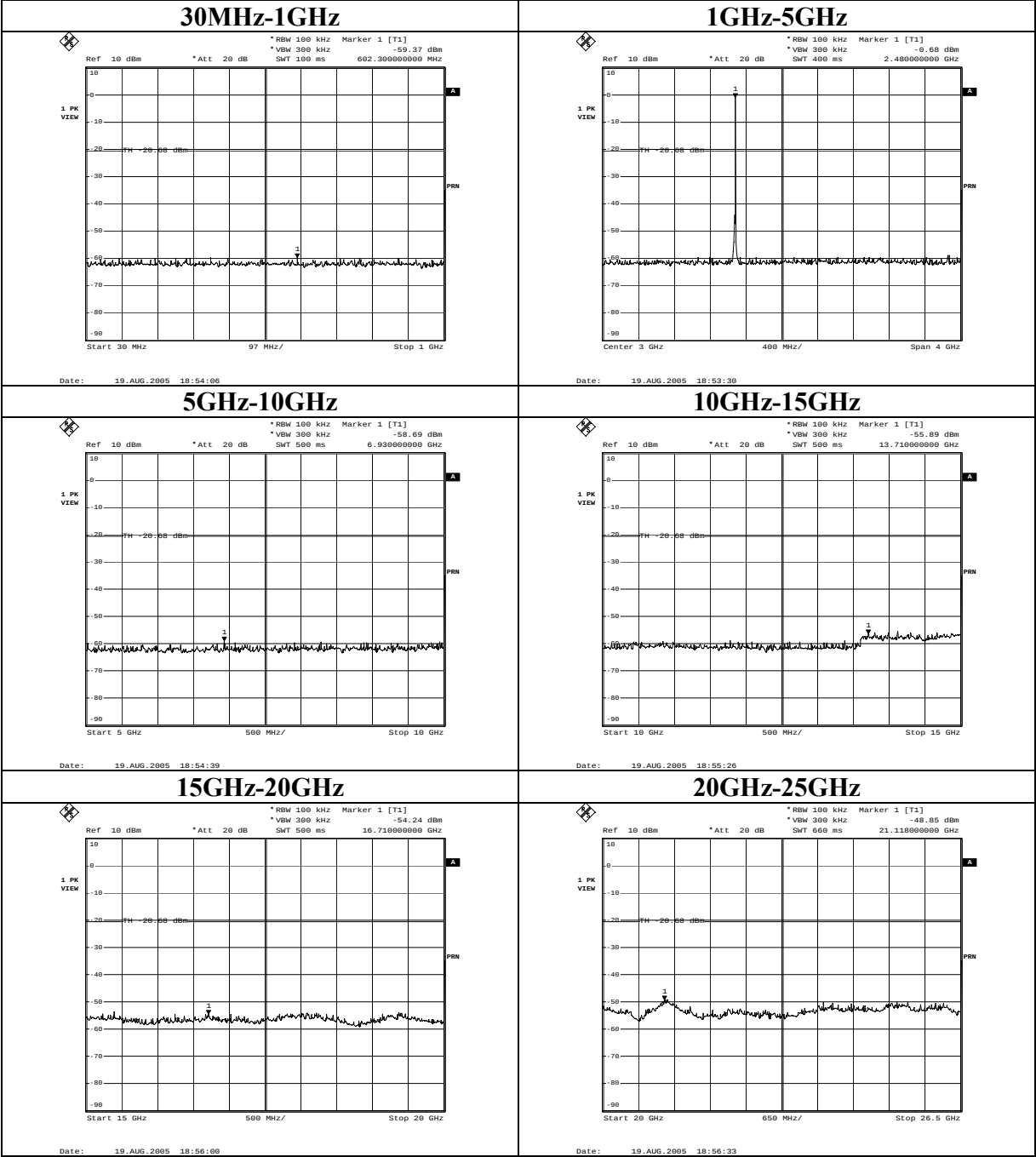
Conducted Spurious Emission

Ch:Mid



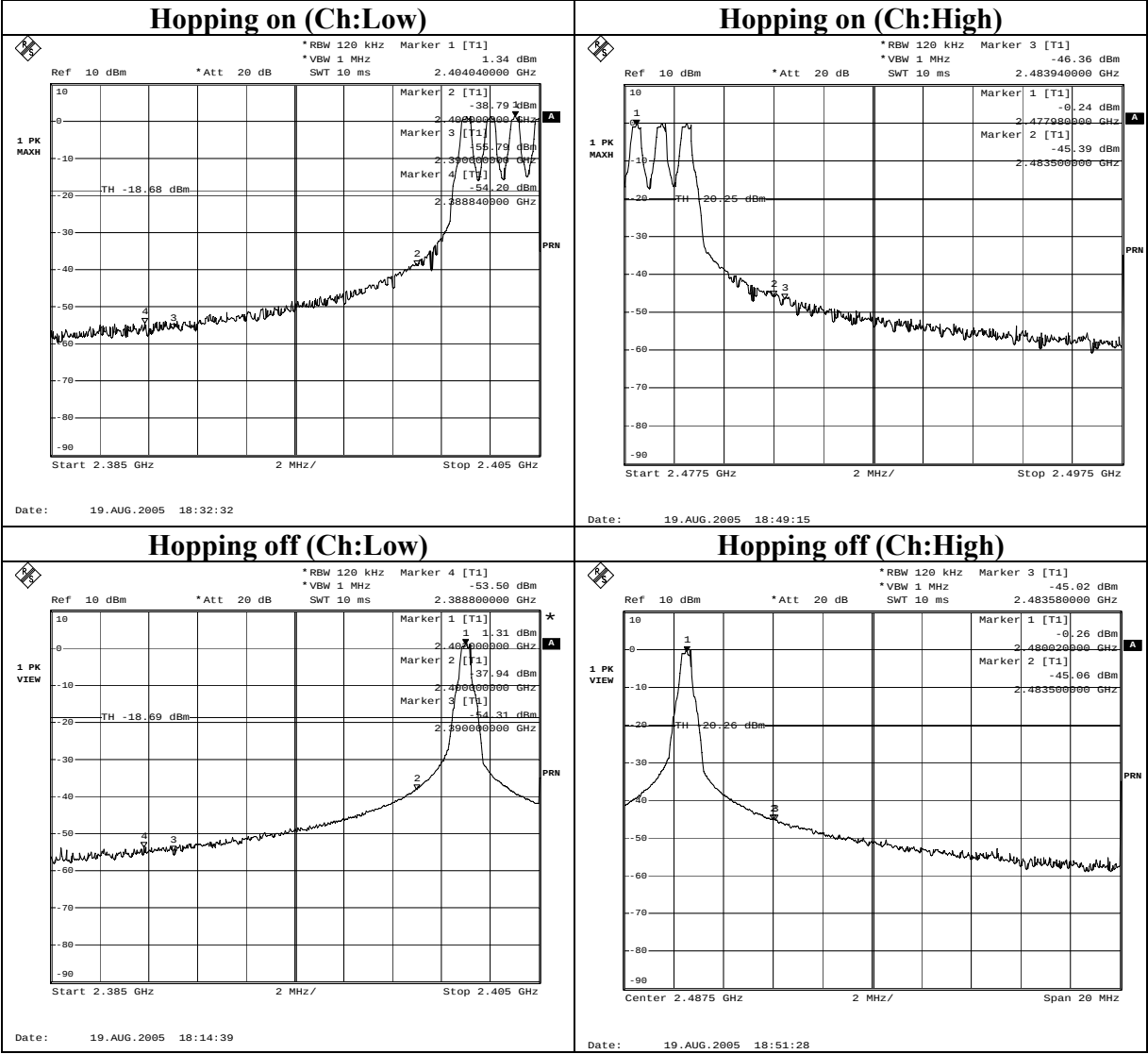
Conducted Spurious Emission

Ch:High



Conducted Spurious Emission

Band Edge compliance



99% Occupied Bandwidth

